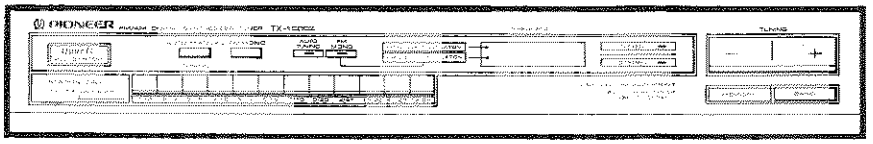
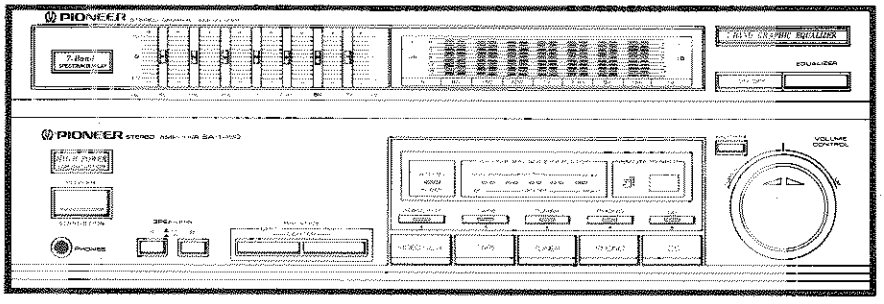
Operating Instructions

SD, SD/G

FM/AM DIGITAL SYNTHESIZER TUNER
TX-1080Z



STEREO AMPLIFIER
SA-1480



Thank you for buying this Pioneer product.
Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.
In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings. However, the method of connecting and operating the unit is the same.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

IMPORTANT NOTICE
[For U.S. and Canadian models]

The serial number for this equipment is located on the rear panel. Please write this serial number on your enclosed warranty card and keep it in a secure area. This is for your security.

[For Canadian model]

CAUTION: TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

ATTENTION: POUR PREVENIR LES CHOCS ELECTRIQUES NE PAS UTILISER CETTE FICHE POLARISEE AVEC UN PROLONGATEUR UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SI LES LAMES PEUVENT ETRE INSEREES A FOND SANS EN LAISSER AUCUNE PARTIE A DECOUVERT.

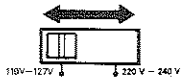
LINE VOLTAGE SELECTOR SWITCH

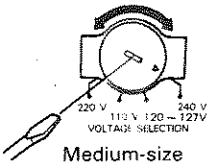
Only multi-voltage models are provided with this switch. U.S., Canadian, European, U.K., and Australian models are not provided with this switch.
Mains voltages in Saudi Arabia are 127 V and 220 V only. Never use this model with 110 V setting in Saudi Arabia.

The line voltage selector switch is on the rear panel. Before your model is shipped from the factory, this switch is set to the power requirements of the destination. Check that it is set properly before plugging the power cord into the AC wall socket. If the voltage is not properly set or if you move to an area where the voltage requirements differ, adjust the selector switch as follows.

1. Use a medium-size screwdriver.
2. Insert the screwdriver into the groove on the voltage selector, and adjust so that the tip of the arrow points to the voltage value of your area.

Set the voltage selector for the voltage in your area.





Medium-size screwdriver

PIONEER®
The future of sound and vision.

SAFETY INSTRUCTIONS

READ INSTRUCTIONS — All the safety and operating instructions should be read before the appliance is operated.

RETAIN INSTRUCTIONS — The operating instructions should be retained for future reference.

HEED WARNING — All warnings on the appliance and in the operating instructions should be adhered to.

FOLLOW INSTRUCTIONS — All operating and use instructions should be followed.

WATER AND MOISTURE — The appliance should not be used near water — for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

LOCATION — The appliance should be installed in a stable location.

WALL OR CEILING MOUNTING — The appliance should not be mounted to a wall or ceiling.

VENTILATION — The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.

HEAT — The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

POWER SOURCES — The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

POWER-CORD PROTECTION — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

POLARIZATION — If your purchased product is provided with a polarized power plug, please read the following instructions. This product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

CLEANING — The appliance should be cleaned only with a polishing cloth or a soft dry cloth. Never clean with furniture wax, benzine, insecticides or other volatile liquids since they may corrode the cabinet.

POWER LINES — An outdoor antenna should be located away from power lines.

NONUSE PERIODS — The power cord of the ap- pliance should be unplugged from the outlet when left unused for a long period of time.

OBJECT AND LIQUID ENTRY — Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

DAMAGE REQUIRING SERVICE — The appliance should be serviced by a Pioneer authorized service center or qualified service personnel when:

- The power-supply cord or the plug has been damaged; or
- Objects have fallen, or liquid has been spilled into the appliance; or
- The appliance has been exposed to rain; or
- The appliance does not appear to operate normally or exhibits a marked change in performance; or
- The appliance has been dropped; or the enclosure damaged.

SERVICING — The user should not attempt to service the appliance beyond that described in the operating instructions. For all other servicing, contact the nearest Pioneer authorized service center.

OUTDOOR ANTENNA GROUNDING — If an outside antenna is connected to the antenna terminal, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges.
In the U.S.A. section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Fig. A

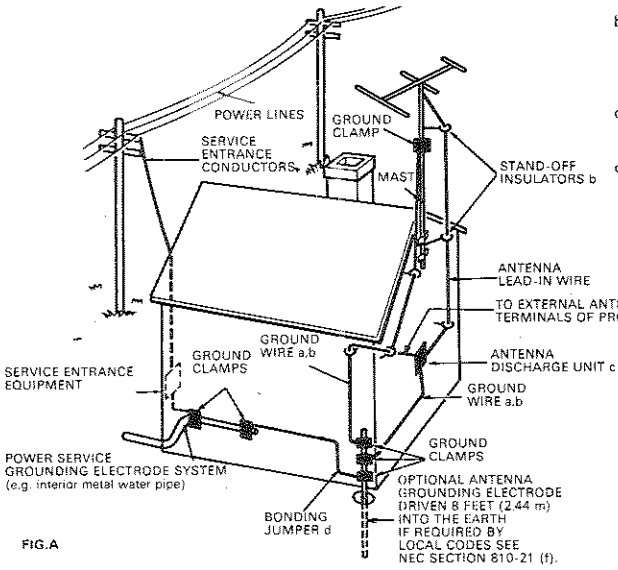

POWER LINES
GROUND CLAMP
SERVICE ENTRANCE CONDUCTORS
MAST
STAND-OFF INSULATORS b
ANTENNA LEAD-IN WIRE
TO EXTERNAL ANTENNA TERMINALS OF PRODUCT
GROUND WIRE a,b
GROUND CLAMPS
ANTENNA DISCHARGE UNIT c
SERVICE ENTRANCE EQUIPMENT
GROUND WIRE a,b
GROUND CLAMPS
POWER SERVICE GROUNDING ELECTRODE SYSTEM (e.g. interior metal water pipe)
OPTIONAL ANTENNA GROUNDING ELECTRODE DRIVEN 8 FEET (2.44 m) INTO THE EARTH IF REQUIRED BY LOCAL CODES SEE NEC SECTION 810-21 (f).
BONDING JUMPER d

FIG.A

a) Use No. 10 AWG (5.3 mm²) copper, No. 8 AWG (8.4 mm²) aluminum, No. 17 AWG (1.0 mm²) copperclad steel, bronze wire, or larger as ground wire.

b) Secure antenna lead-in and ground wires to house with stand-off insulators spaced from 4 feet (1.22 meters) to 6 feet (1.83 meters) apart.

c) Mount antenna discharge unit as closely as possible to where lead-in enters house.

d) Use jumper wire not smaller than No.6 AWG (13.3 mm²) copper, or the equivalent, when a separate antenna-grounding electrode is used.
See NEC Section 810-21 (j).

IMPORTANT 1

The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

IMPORTANT 2

If the apparatus is fitted with AC mains power outlet(s), see REAR PANEL FACILITIES for convenient connection of additional Hi-Fi component(s). Make all connections to the AC outlet(s) and the signal terminals first. Connect the plug to the wall socket last, make sure that the power switch is off. Disconnect the wall plug when the equipment is not in (regular) use, e.g. when on vacation.

FOR USE IN THE UNITED KINGDOM

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral
Brown: Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured marking identifying the terminals in your plug proceed as follows:
The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.
Equipment sold in the U.K. is not supplied with a power plug.

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FEATURES

AMPLIFIER

High power output of 130 W + 130 W

The following operations are possible using the accessory remote control unit:

- Power ON/OFF
- SLEEP timer ON/OFF
- Volume UP/DOWN
- Muting ON/OFF
- Function selection
- Tuner station selection
- Compact disc player operation
- Cassette tape deck operation
- Laser Vision Player operation
- VCR operation
- TV operation

Includes a 7-band graphic equalizer and an LED spectrum analyzer.

Built-in sleep timer.

TUNER

24-station random FM/AM presetting

A total of up to 24 FM and AM stations can be preset in order to facilitate instant recall of your favorite stations in areas where the frequency bands are crowded with stations.

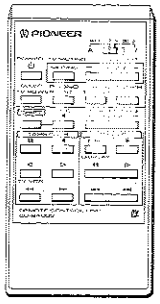
FM MONO switch

When the FM MONO switch is set to on, those stereo broadcasts that are drowned out by noise can be tuned in with greater clarity. The FM MONO reception mode can be preset for individual broadcasting stations.

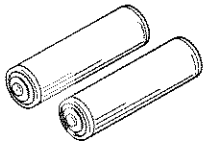
BEFORE USING THIS COMPONENT

Check for presence of all accessories

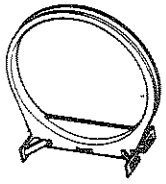
Remote control unit 1
(CU-SA003)



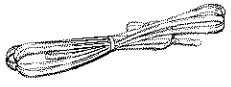
Dry Batteries (Size AAA/R03) 2



AM loop antenna 1



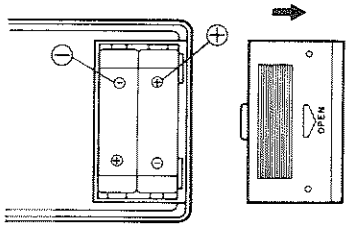
FM T-type antenna 1



Loading dry batteries in the remote control unit

(1) Open the battery compartment lid on the reverse panel, and insert the accessory batteries taking care to arrange the polarities in the directions shown.

(2) Replace the battery compartment lid.



NOTE:

- *When not using the remote control unit for an extended period (one month or more), remove the batteries in order to prevent damage from leakage. If battery leakage does occur, use a rag to carefully wipe away the leaked fluid, and insert new batteries.*
- *Do not lay books, or other objects on top of the remote control unit, since the keys may be depressed, causing early depletion of the batteries.*
- *If the remote control unit's operating distance becomes noticeably shortened, the batteries are likely depleted. Replace them with new batteries.*

If dry batteries are misused, leakage and rupture may occur. Be sure to note the following precautions:

- *Insert batteries correctly with polarities as shown in the diagram within the battery case.*
- *Do not mix fresh batteries with already used batteries.*
- *Batteries of the same size may differ in voltage depending on manufacturer. Do not mix batteries of differing make together.*
- *Both rechargeable and disposable batteries are available. Be sure to carefully read the precautionary items noted on the batteries you use.*

ANTENNA CONNECTIONS

Radio reception is not possible unless the antenna is properly connected.

The strength of broadcast signals varies from one area to another (signal propagation is especially poor in metropolitan areas, where there are many tall buildings, and in mountainous areas). Proper antenna installation is vital to good reception.

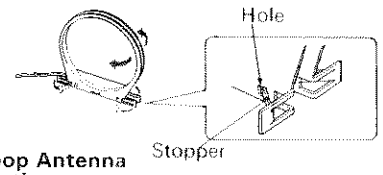
AM ANTENNA

The AM loop antenna supplied with the tuner should be connected to the AM antenna terminals. The antenna should be placed at a distance from the tuner, and should not be allowed to touch metallic objects. Avoid placing it near CD players, personal computers, television sets, and other devices generating radio frequencies.

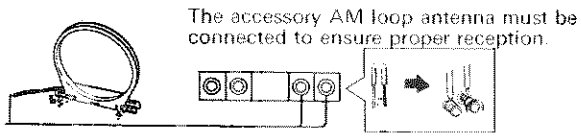
Setting Up the AM Antenna

- Fold out the supports on the bottom of the antenna. Insert the stopper in the hole in the antenna to lock them in place.
- Place the antenna on a level surface and rotate it to locate the orientation that yields the best reception.

AM Loop Antenna Set-up



AM Loop Antenna Connection



External AM antenna

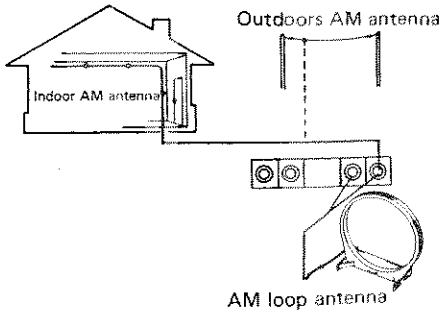
Indoor AM antenna

Provide a vinyl-coated wire (5 to 6 meters long). Secure one end to the AM terminal and the other end to a wall or other high location.

Outdoor AM antenna

If reception is still poor even when a lead antenna has been stretched out indoors, stretch out a vinyl-coated wire and secure it outdoors.

Connecting the external AM antenna



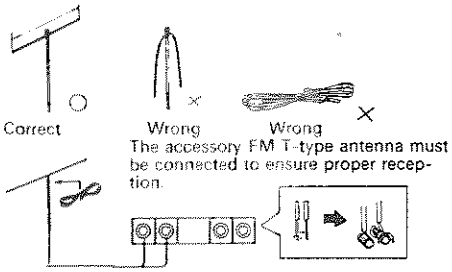
NOTE:
Do not detach the AM loop antenna when using the external AM antenna.

FM ANTENNA

FM T-type Antenna Attachment

Connect the accessory FM T-type antenna to the FM terminals. Stretch the antenna out to its full length, and affix it to a wall, etc.

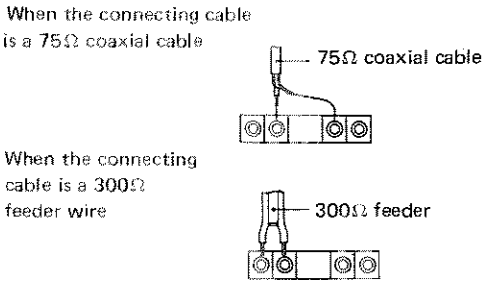
Stretch out both ends.



External FM antenna installation

Use an external antenna when the signals from the station are weak and cannot be picked up by the accessory T-type FM antenna, or when the sound heard is accompanied by large amounts of noise. There are two ways of connecting the external FM antenna to the ANTENNA terminals: with 300Ω feeder wire, or with a 75Ω coaxial cable.

It is recommended that you use the 75Ω coaxial cable, so that the effects of extraneous noise are reduced to a minimum.


When the connecting cable is a 75Ω coaxial cable
75Ω coaxial cable
When the connecting cable is a 300Ω feeder wire
300Ω feeder

AM/FM CHANNEL STEP SWITCH

The AM/FM channel step switch is located on the rear panel of the digital synthesizer tuner. Before the tuner leaves the factory, this switch is set to the channel allotment plan of the area in which the tuner is sold. When the TUNING switch is given a single push, the frequency display will change in the following units.

Model destination	CHANNEL STEP switch position	Frequency change	
		FM mode	AM mode
North America and Continental South America	100 kHz/10 kHz	100 kHz	10 kHz
Other countries	50 kHz/9 kHz	50 kHz	9 kHz

NOTE:

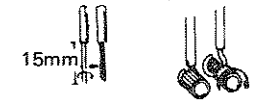
- *If the switch is set to the wrong position, correct tuning will not be possible.*

Consult your dealer if you are not sure about the channel allotment plan in your area.

CONNECTIONS

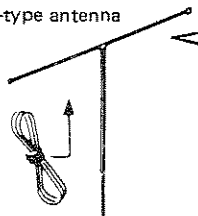
When connecting Pioneer system components, please refer to the operating instructions for the audio rack.

CONNECTING THE FM T-TYPE ANTENNA AND AM LOOP ANTENNA



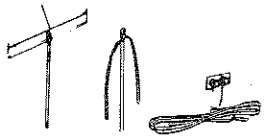
1. Strip the end of the wires.
2. Wrap the end of the wire in a clockwise direction aroud the base of the terminals and tighten the terminals to secure.

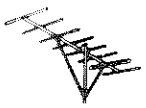
Accessory FM T-type antenna



- Use for FM reception until a special-purpose FM antenna is installed.
- Stretch both ends taut and affix to a wall, etc.

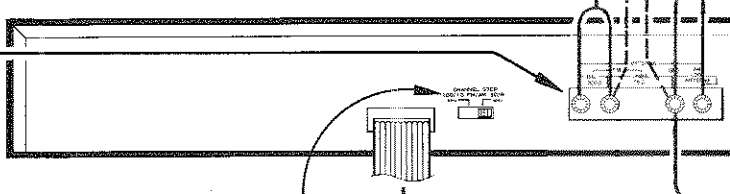
Stretch taut and affix.



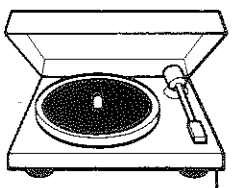


Outdoor FM antenna

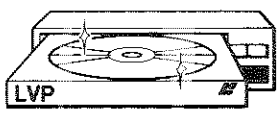
Accessory AM Loop Antenna



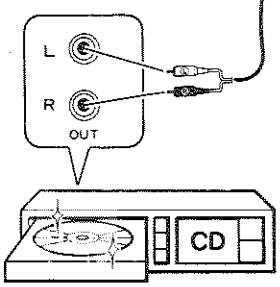
AM/FM CHANNEL STEP switch



Turntable



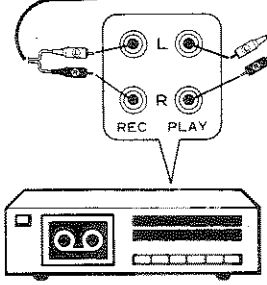
- Audio channel from video disc player or video cassette recorder.



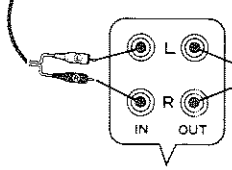
Compact disc player

This terminal is for use with tuners other than the TX-1080Z dedicated tuner.

Note:
If the TX-1080Z is used together with another tuner, the sound will be mixed.



Tape deck

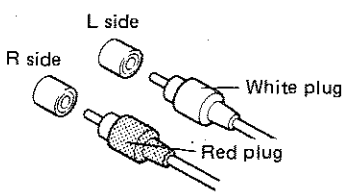


Adaptor component (Dynamic expander)

Always remember to keep the connecting bars in place when these cords are not connected.

CONNECTING INPUT/OUTPUT CORDS

Connect the white plug to the L (left) side, and the red plug to the R (right) side. Be sure to push the plugs in securely.



REMOTE CONTROL OUT jack

Connect this terminal to other Pioneer components when using this unit's remote control to control the other components. (See Page 8.)

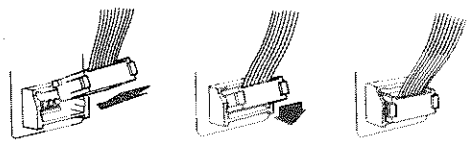
Antenna ground

Although grounding is not always necessary for reception, it is recommended for protection against damage from lightning if an outdoor FM antenna is used. Grounding is recommended as well to help reduce noise and hum.

NOTE:

Never make the ground connection to a gas pipe as sparks could cause the gas to ignite.

Antenna ground

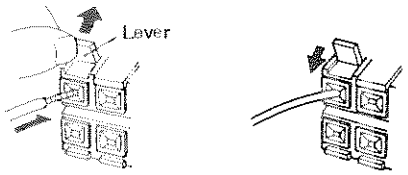


Insert the connector obliquely from above, and push it down until it locks, thus ensuring that it is connected. When desconnecting the connector, pull it in the opposite direction while pressing the left and right claws.

CONNECTING SPEAKER WIRES

1. Strip off the vinyl covering and twist the strands together.

2. Raise the lever in the direction of the arrow and insert the exposed conductor into the hole.
3. Now return the lever to its original position to secure the cord.



NOTE:

Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.

About Speaker Impedance

When speaker systems are connected to only one of the SPEAKERS A, B terminals, such speakers should have rated impedance in the range of 8 – 16Ω.

NOTE:

When the speaker system is connected to only one speaker terminal (A or B) and both A and B selector switches are ON, there will be no sound.

Turn ON only the selector to which the speaker system is connected.

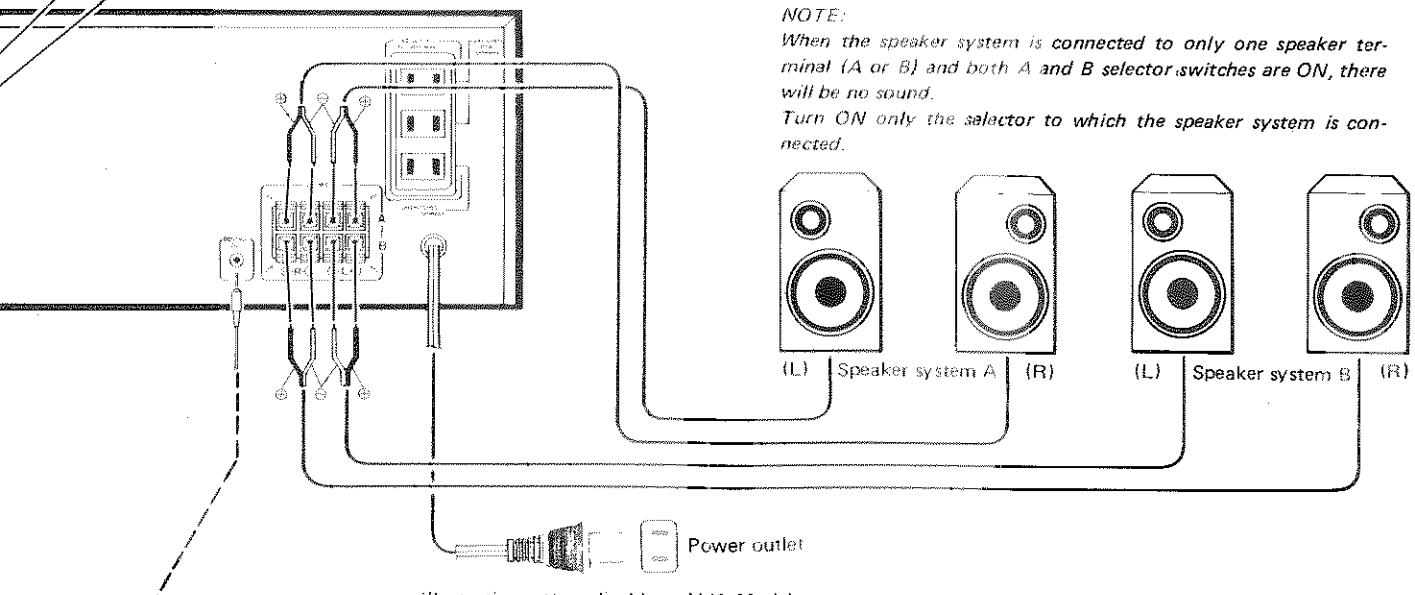
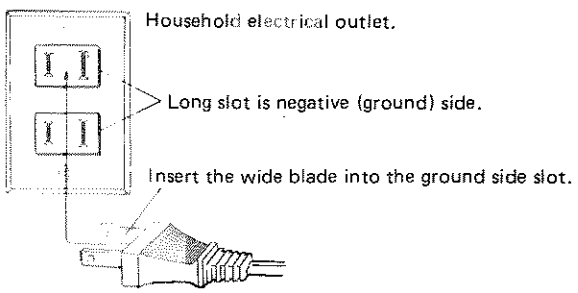


Illustration not applicable to U.K. Models

CONNECTING THE POWER CORD
(For U.S.A. and Canadian models)

Household electrical outlets are provided with specific polarity, a positive side and a negative (ground) side. This unit utilizes such polarity in order to improve sound quality. As shown in the illustration, be sure to insert the power plug so that its blades match the width of slots in the outlet.

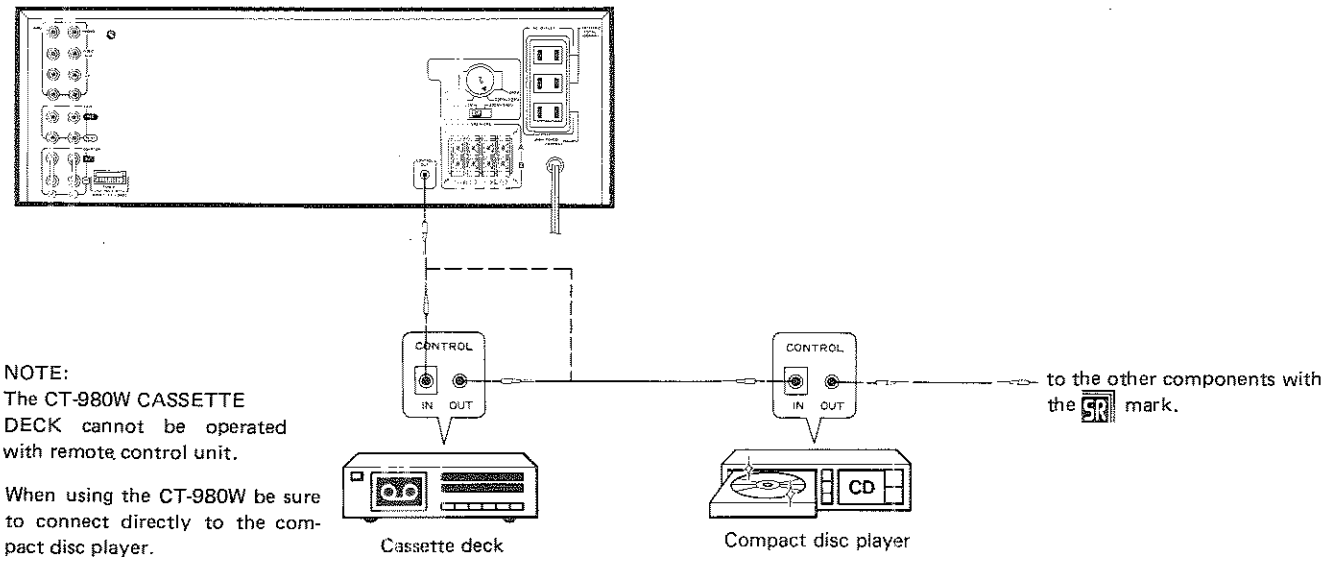


CONNECTING THE CONTROL OUT TERMINAL

Connect this terminal with using Pioneer components with the SR mark.
In this way, the signals received from the remote control unit will be transmitted to the other components with the SR mark.
Connect to the CONTROL IN terminal of the other components you use.

- Use the accessory control cords supplied with the SR marked components.
- Be sure to insert the plugs securely.

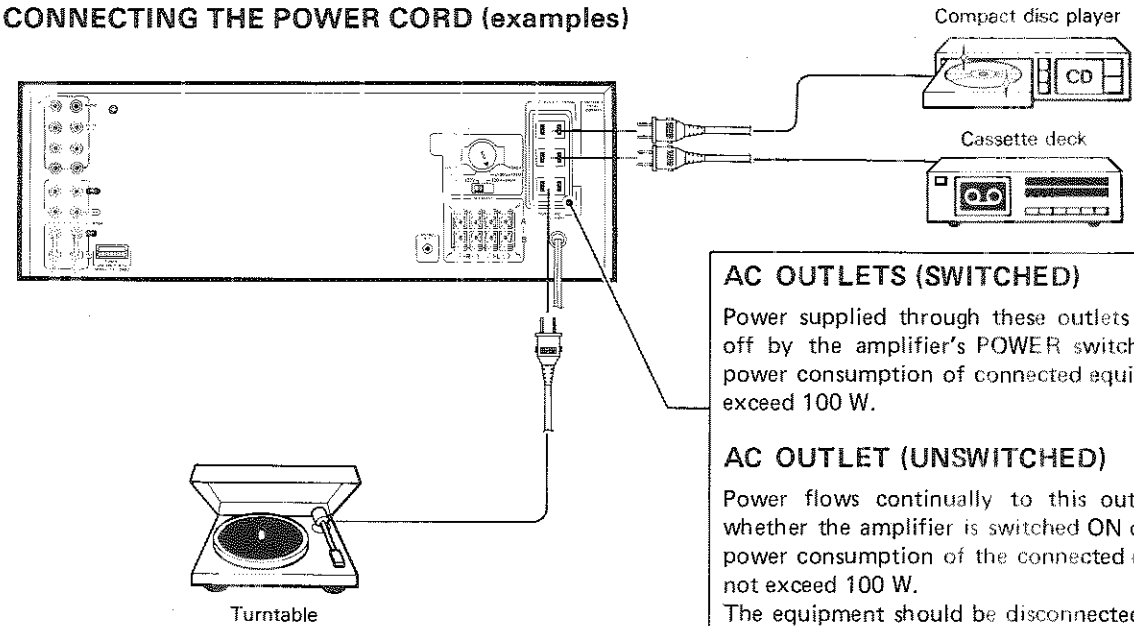
NOTE:
You cannot control the unit using the remote control unit by simply making these connections. Be sure to connect the output cords as well.



NOTE:
The CT-980W CASSETTE DECK cannot be operated with remote control unit.

When using the CT-980W be sure to connect directly to the compact disc player.

CONNECTING THE POWER CORD (examples)



AC OUTLETS (SWITCHED)

Power supplied through these outlets is turned on and off by the amplifier's POWER switch. Total electrical power consumption of connected equipment should not exceed 100 W.

AC OUTLET (UNSWITCHED)

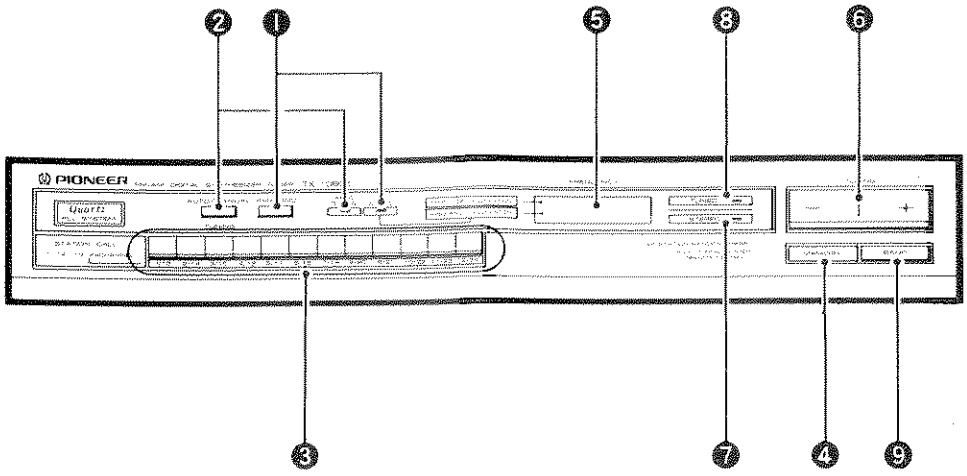
Power flows continually to this outlet, regardless of whether the amplifier is switched ON or OFF. Electrical power consumption of the connected equipment should not exceed 100 W.
The equipment should be disconnected by removing the power plug from the wall socket when not in regular use, e.g., when on vacation.

NOTE:
Do not connect appliances with high power consumption such as heaters, irons, or television sets to the AC OUTLETS in order to avoid overheating or fire risk.

Note:
AC outlets and power plugs are either non-polar or polar.
You cannot insert a polar power plug into a non-polar AC outlet.
Connect only equipment which is provided with a non-polar plug to a non-polar AC outlet.

NAMES AND USE OF PARTS

TUNER



❶ FM MONO switch/indicator

Normally this is set to the off position (the FM MONO indicator goes off). When noise spoils the reception of an FM program, press the switch to the on position (the FM MONO indicator will now light).
The program of an FM stereo broadcast will be heard in mono.
The setting of the FM MONO switch (on or off) is memorized along with the station's frequency in the STATION CALL switches.
When using the preset tuning feature, reception will be in the mode selected when the station was memorized.
This switch will not function for AM reception.

❷ AUTO/MANUAL tuning switch/indicator

Use to select either the AUTO mode or MANUAL mode for FM/AM reception. (When the auto tuning made is selected, the AUTO TUNING indicator will now light.

❸ STATION CALL switches

These are used to recall preset broadcasting stations and to preset the station.

❹ MEMORY switch

This switch is used to memorize stations. When the switch is pressed, the frequency indicator will flash. To memorize the frequency of any station, press the STATION CALL switch while the frequency display is flashing.

❺ FREQUENCY display

Permits reading the received frequency at a glance from the displayed figure. The FM band is indicated by MHz, and the AM band by kHz.

❻ TUNING switch

This is used to locate the stations.
Push either side of this switch: the left side "–" to go to a lower, and the right side "+" to go to a higher frequency.

❼ STEREO indicator

This lights when a stereo program has been picked up during an FM broadcast.

❽ TUNED indicator

This lights to indicate when the finest tuning of a station has been achieved.

❾ BAND SELECTOR switch

This is used to select the band of the desired station. The bands change alternately each time the switch is pressed.

FM reception → AM reception →

AMPLIFIER

❶ POWER (STANDBY/ON) switch

- The accessory remote control unit can also be used to operate this switch's STANDBY/ON function.
- The POWER switch selects the transformer's secondary even in STANDBY position. The unit's circuitry will work as long as the power cord is connected to a power outlet.
- When not using the unit for a long period, disconnected the power cord.

❷ PHONES jack

When using headphones, insert their plug into this jack.

❸ SPEAKERS A selector switch

Use this switch to listen to the speaker systems connected to the SPEAKERS A terminals.
[ON] — Depressed position: Sound is heard from the speaker systems.
[OFF] — Released position: No sound is heard from the speaker system. Set to this position when listening with headphones.

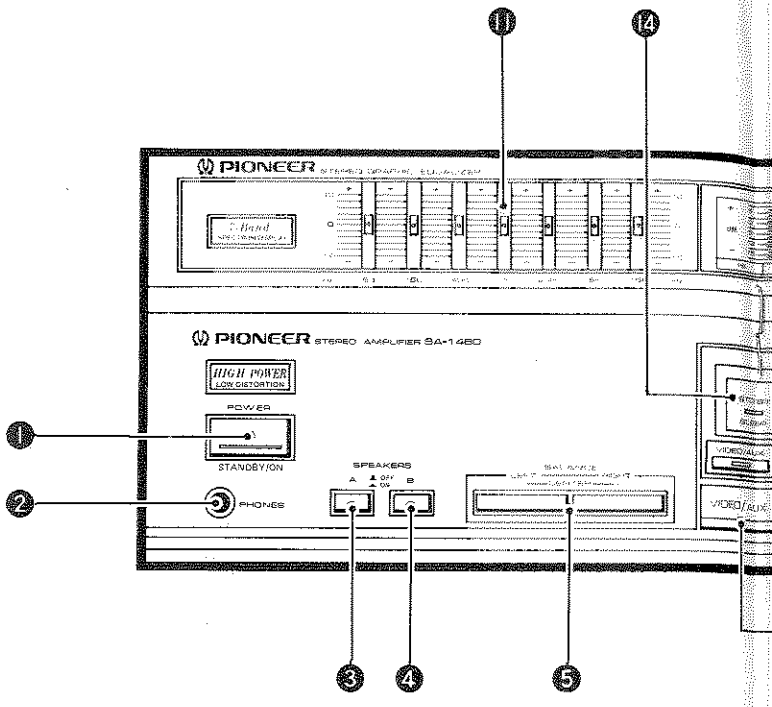
❹ SPEAKERS B selector switch

Use this switch to listen to the speaker systems connected to the SPEAKERS B terminals.
[ON] — Depressed position: Sound is heard from the speaker systems.
[OFF] — Released position: No sound is heard from the speaker system. Set to this position when listening with headphones.

NOTE:
When the speaker system is connected to only one speaker terminal (A or B) and both A and B selector switches are ON, there will be no sound.
Turn ON only the selector to which the speaker system is connected.

❺ BALANCE control

Normally, the BALANCE indicator of the mode display is set to the center position. By pressing the [L] and [R] controls simultaneously, the balance will be set to the center position. If the sound is unbalanced to one side, adjust in the following way: If the sound is too loud on the right side, press [L], if too loud on the left side, press [R].



❻ FUNCTION switches

Use to select playback source.
[VIDEO/AUX] — Press when listening to programs from a component connected to the VIDEO/AUX terminals.
[TAPE] — Press when listening to tape playback with a cassette tape deck.
[TUNER] — Press when listening to AM or FM broadcasts with a tuner.
[PHONO] — Press when listening to record playback on a turntable.
[CD] — Press when listening to compact disc playback with a CD player.

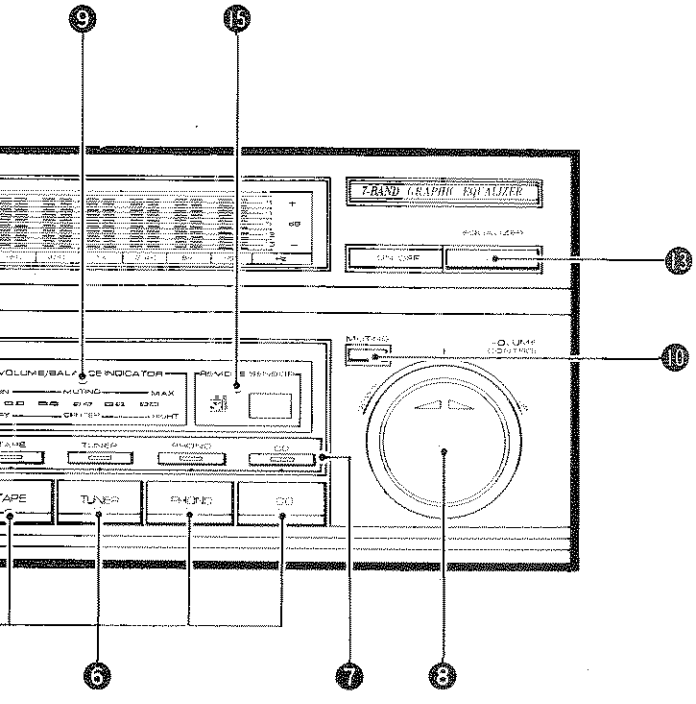
❼ FUNCTION indicators

These indicators light to show the setting of the FUNCTION switches.

❽ VOLUME control

Use to adjust sound volume.
[UP] — (Turn to the right):
Sound volume is increased.
[DOWN] — (Turn to the left):
Sound volume is decreased.
Adjustment can also be performed with the accessory remote control unit.

NOTE:
Since the VOLUME control is operated with an electronic system and turns to the right or left by only 30°, do not turn it by more than this. Release to return it to the center position.



⑨ VOLUME/BALANCE indicator

- Normally, this indicator functions to display the sound volume level.
- When the balance control is pressed, the indicator switches to display the right-left sound balance. After several seconds, the indicator returns automatically to the volume display.
- When the MUTING switch is ON, the indicator flashes.

⑩ MUTING switch

Use to temporarily cut out all audio signals.
When the mode display shows the flashing VOLUME/BALANCE indicator, the function is ON, and all sounds are cut off.
When turned OFF, the sound returns to its previous level.
The muting ON/OFF function can also be operated by the accessory remote control unit.

⑪ GRAPHIC EQUALIZER controls/indicators

These controls can be used to emphasize or de-emphasize sounds in the frequency bands 60Hz, 150Hz, 400Hz, 1kHz, 2.4kHz, 6 kHz, 15kHz, thus allowing you to control tone quality. The center position of each control is the normal (flat) setting; when raised above the center position, the control's frequency band is emphasized; when lowered, the band is de-emphasized.

⑫ SPECTRUM ANALYZER

This display shows the condition of sound signals compensated with the graphic equalizer controls.
(Because the level indicator is connected to the input side, the indication does not change when the VOLUME control is turned.)

⑬ EQUALIZER ON/OFF selector switch/indicators

When this switch is pressed, the equalizer indicators light and its functions become operative. When pressed once again, the indicators go out and its functions are turned OFF. Use this switch in the following manner:
[ON] : When using the equalizer to add sound compensation while performing program sources, and playing back and/or recording results.
[OFF] : When not using the equalizer, but playing back or recording program sources without compensation.

⑭ SLEEP/STD-BY indicator

This indicator lights or flashes when the accessory remote control unit is used to turn the SLEEP key or POWER key. When the SLEEP key is ON, the indicator will light. (Initially it will flash slowly, then gradually become faster.)
60 minutes after the sleep timer is turned ON, the power switch will be turned STANDBY automatically.

⑮ REMOTE SENSOR window

This component features a built-in microcomputer which will recall the last-set positions of the following switches for up to about one week after the power cord is disconnected. As a result, when the power is turned ON again, the previously set positions will be recalled automatically:

- FUNCTION switch
- BALANCE control
- MUTING switch
- VOLUME control
- EQUALIZER ON/OFF switch

When the unit is not used for more than a week, the memorized setting positions will be erased, and returned to the following settings:

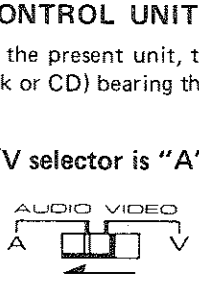
- VOLUME control ..... minimum
- MUTING switch ..... OFF
- BALANCE control ..... CENTER
- FUNCTION switches ..... TUNER
- EQUALIZER ON/OFF switch ..... OFF

REMOTE CONTROL UNIT OPERATION

REMOTE CONTROL UNIT

In addition to the present unit, the remote control unit can also be used to operate other Pioneer components (TV, VCR, LVP, Tape deck or CD) bearing the SR mark.

When the A/V selector is "A"



❶ POWER key

❷ MUTING key

❸ VOLUME (– : down, + : up) key

❹ SLEEP key

The sleep timer can be operated for up to 60 minutes. The STANDBY/SLEEP indicator flashes while the sleep timer is operating. The flashing speed gradually increases as the set time elapses.

❺ FUNCTION selector keys

❻ CHANNEL (– : down, + : up) key

The channel which is memorized in the STATION CALL switch will be received.

\+ : The STATION CALL switches will light sequentially in ascending order of channel numbers.

– : The STATION CALL switches will light sequentially in descending order of channel numbers.

❼ CD keys

▷ (Play) : Begins playback. (So that the function of the amplifier section turns to CD).

❚❚ (Pause): Press to temporarily pause playback.

■ (Stop) : Press to stop playback.

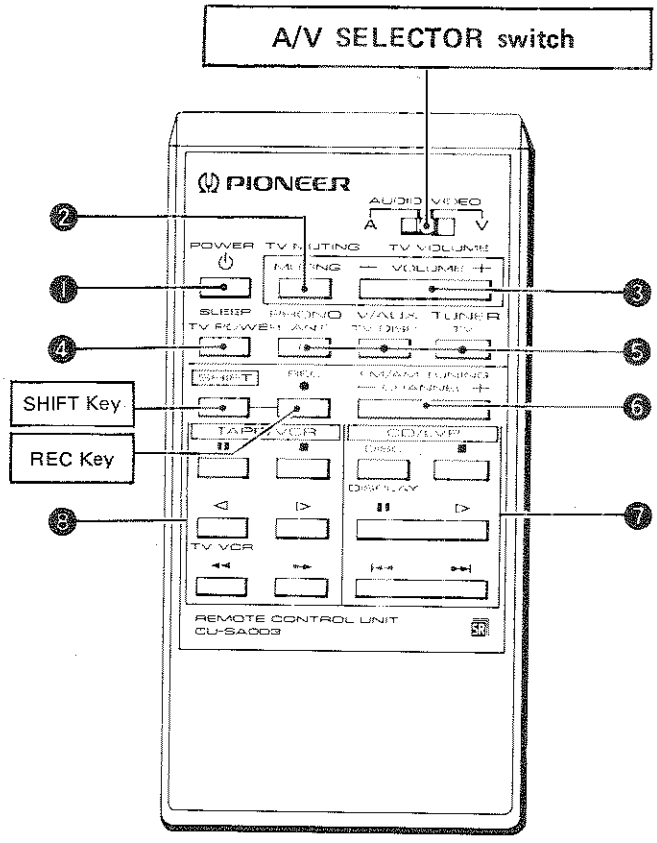
DISC : Used to select one of the disc numbers (1–6) for playback. Use this key when having combined a Pioneer CD player with a magazine system.

NOTE:

Note that DISC selector key on the accessory remote control unit may not function, depending on the CD player used.

▶▶| (Track search) :
When pressed once, play advances to the beginning of the next track; when pressed continuously, advances to further tracks.

|◀◀ (Track search) :
When pressed once, returns to the beginning of the currently playing track; when pressed continuously, returns to earlier tracks.



❽ TAPE keys

The CT-980W CASSETTE DECK cannot be operated with this unit.

▷ (Play) : Press for foward direction playback.

◁ (Play) : Press for reverese direction playback.

(So that the function of the amplifier section turns to TAPE).

❚❚ (Pause): Press to temporarily pause recording or playback.

▶▶ : Winds the tape quickly from left to right.

◀◀ : Winds the tape quickly from right to left.

■ (Stop) : Stop tape travel.

When the A/V selector is "V"

❶POWER key

❷MUTING key

❸ VOLUME (– : down, + : up) key

❹ TV power key

Use to turn power ON/OFF to TV.

❺ ANT select key:

This is for switching the TV antenna.

TV DISP key:

TV display key shows/erases DISPLAY of the television screen.

TV key:

Sets the TV set function to TV and the amplifier section function is set to VIDEO/AUX.

❻ TV CHANNEL selector key (– CHANNEL +)

This key is pressed to select the TV channel memorized.

❼ LVP (LaserVision player) keys

▷ (Play) : Begins playback. (The amplifier section function is set to VIDEO/AUX and the TV function is set to VDP).

▮▮ (Pause): When pressed, picture and sound vanish and playback is temporarily interrupted. Press again to release the pause mode.

■ (Stop) : Stops playback.

DISPLAY : Shows/erases a chapter number and a frame (or time) number on the television screen.

▶▶| (Scan) : Scanning in forward direction.

|◀◀ (Scan) : Scanning in reverse direction.

NOTE:

• In the case of the LVP, the (|◀◀ and ▶▶|) symbols mean manual last feed. You cannot perform a chapter search.

❽ VCR keys

▷ (Play) : Begins playback. (The amplifier section function is set to VIDEO/AUX and the TV function is set to VCR).

▮▮ (Pause): Temporarily interrupts playback or recording.

■ (Stop) : Stops tape travel.

▶▶ (FF) : Advances the tape quickly.

◀◀ (REW) : Rewinds the tape quickly.

◁ (TV/VCR) : Switches the antenna from VCR to TV.

Functions used in combination with the SHIFT key

Be sure to press the SHIFT key first and keep it pressed while operating other keys.

SHIFT + MUTING	:	TV muting.
SHIFT + –VOLUME	:	TV volume down.
SHIFT + VOLUME +	:	TV volume up.
SHIFT + SLEEP	:	VCR power
SHIFT + –CHANNEL	:	TUNER tuning down.
SHIFT + CHANNEL+	:	TUNER tuning up.
SHIFT + REC ●	:	When the A/V selector is "A", begin the cassette tape deck recording. When the A/V selector is "V", begin the VCR recording

Refer to each instructions manual about the TV–, VCR–, LVP–, Tape Deck– or CD-control.

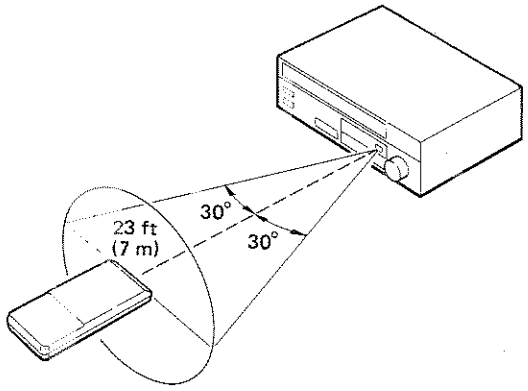
Range of Remote Control

When the remote control unit is pointed at the remote control sensor window on the stereo amplifier and any of its keys is pressed, the unit and other components can be operated by remote control.

Distance: Within a range of about 23 feet (7 meters) from the unit's remote control sensor window.

Angle: Within approx. 30 degrees from the center of the unit's remote control sensor window.

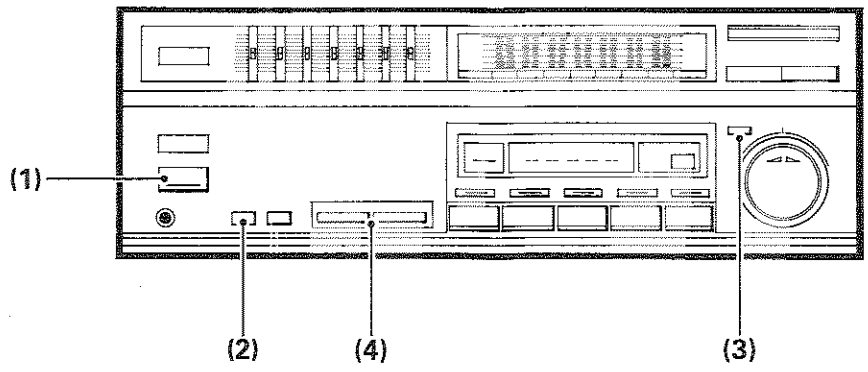
Remote control will not be possible if there is an obstacle between the remote control unit itself and the unit's remote control sensor window.



OPERATIONS

BEFORE BEGINNING OPERATIONS

Set the controls and switches as follows:



(1) Set the POWER switch to ON.

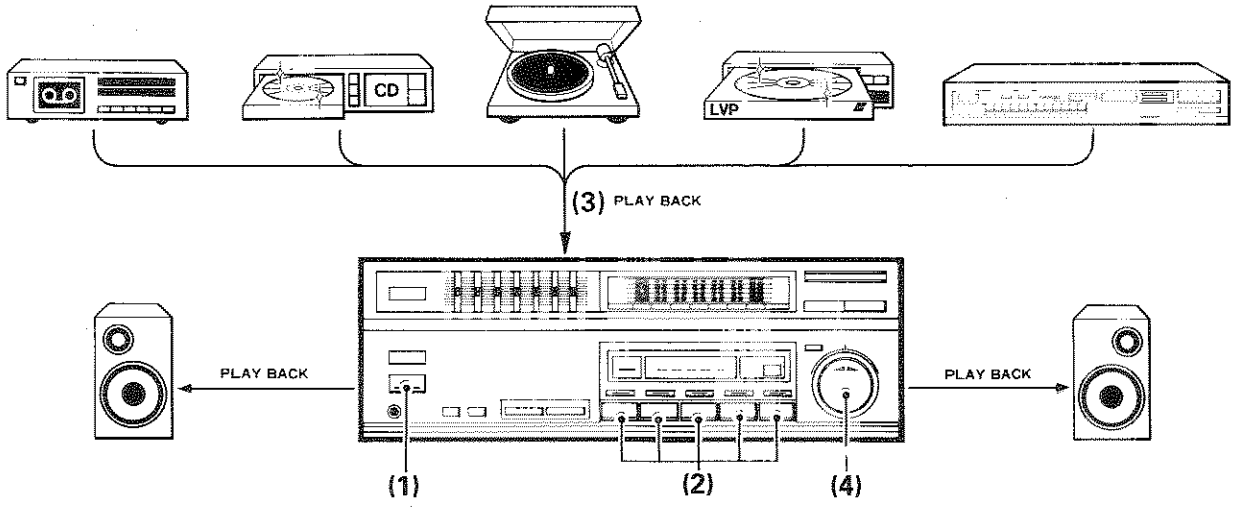
(2) Set the SPEAKERS A switch to ON.

When the speaker system is connected to the speakers A terminals.

(3) Set the MUTING switch to OFF.

(4) Set the BALANCE control to CENTER.

OPERATION PROCEDURES



(1) Turn on power to this unit and to the other equipment to be used.

(2) Press the FUNCTION switch

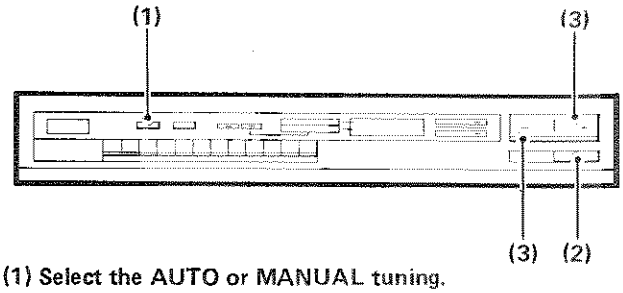
Use to select playback source.

- When listening to programs from equipment connected to the VIDEO/AUX terminals: Press [VIDEO/AUX].
- When listening to a tape: Press [TAPE].
- When listening to an AM or FM broadcast: Press [TUNER].
- When listening to a record: Press [PHONO].
- When listening to a compact disc: Press [CD].

(3) Operate equipment to begin playback.

(4) Adjust playback volume with the VOLUME control on this unit.

Listening to FM or AM broadcasts.



(1) Select the AUTO or MANUAL tuning.

- When the auto tuning mode is selected, the AUTO TUNING indicator will now light.

(2) Use the BAND selector switch to select either the FM or AM reception band.

- For FM broadcasts, the "FM" and "MHz" indicators will light.
- For AM broadcasts, the "AM" and "kHz" indicators will light.

(3) Press the – (Down) or + (Up) side of the TUNING switch.

Auto tuning:

The tuner will automatically search for a broadcasting station, and stop when one is found. To search for another station, press again.

Manual tuning:

The tuning frequency will change by one step each time the switch is pressed. Press as many times as necessary to tune in the desired station.

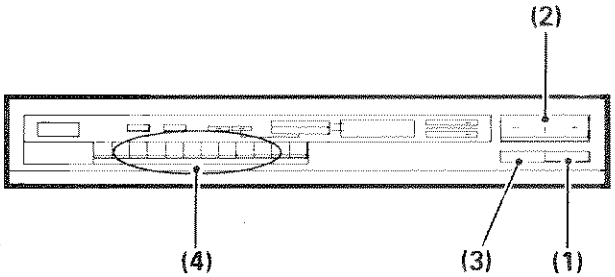
- If the switch is held depressed, the reception frequency will change continuously, and stop when the switch is released.

(3) When you wish to receive a different station within the same band, repeat step 3. To receive a station on a different reception band, repeat steps 2 and 3.

(4) Adjust the volume and tone of the stereo amplifier.

NOTE:
When AUTO TUNING is in use, reception may not be possible over long distances or when signals are weak. At these times MANUAL TUNING is recommended.

PRESETTING FM AND AM STATIONS



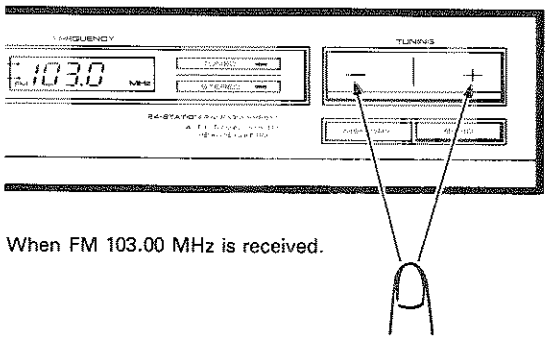
You can preset 12 FM and AM stations in Mode 1, and 12 station in Mode 2, that is a total of 24 stations.

(1) Use the BAND selector switch to select either the FM or AM reception band.

- For FM broadcasts, the "FM" and "MHz" indicators will light.
- For AM broadcasts, the "AM" and "kHz" indicators will light.

(2) Use the TUNING switch to tune in the desired station.

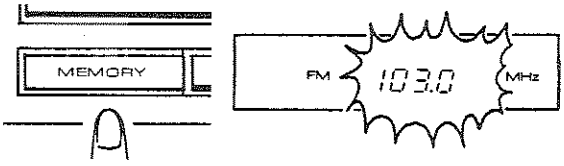
> When memorizing an FM station, either press the FM MONO switch to forcibly memorize the station in the monaural mode, or memorize the station in the auto stereo mode (with FM MONO switch left in the OFF position).



When FM 103.00 MHz is received.

(3) Press the MEMORY switch.

- The display will flash (about 10 seconds).

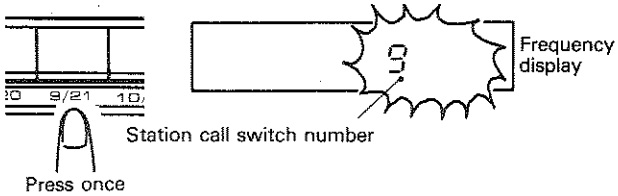


(4) Press the STATION CALL switch

- While the display is flashing, press the switch corresponding to the station which you wish to preset or re-preset.

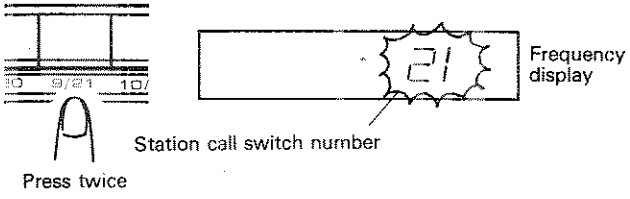
When presetting a station to Mode 1 (e.g. presetting a station to No. 9):

By pressing the station call switch once, the station will be preset to Mode 1.



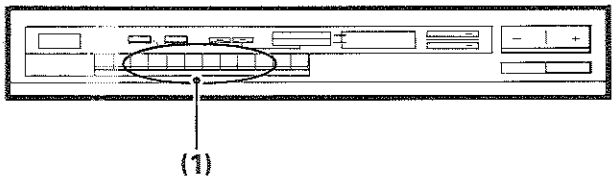
When presetting a station to Mode 2 (e.g. presetting a station to No. 21):

By pressing the station call switch twice, the station will be preset to Mode 2.



- After you press the STATION CALL switch, the display will flash for about 2 seconds, then the station will be memorized. If you press another switch while the display is flashing, the station will not be memorized.

Preset station tuning



(1) Press the STATION CALL switch into which the desired station has been memorized.

- To listen to a Mode 1 broadcast, press the switch once, and to listen to a Mode 2 broadcast, press it twice.
- By pressing the STATION CALL switch, the switch number will be displayed, then the frequency will be displayed.

NOTE:
If, for example, you wish to receive the station memorized in STATION CALL switch "13" when listening to the station memorized in switch "9", press switch "13" instead.

In this way, simple and accurate reception of any desired station is possible.

NOTE:

- *The contents of the STATION CALL switch will be preserved for several days, even if the amplifier's power cord is unplugged.*
- *If a preset station has been erased, reset it.*

Last station memory

- When the amplifier's POWER switch is pressed to turn power on, the last station received before the power was previously turned off will be received again.
- When power is ON, if the BAND selector switch is pressed, the last station received before the BAND selector switch was previously pressed will be received again.

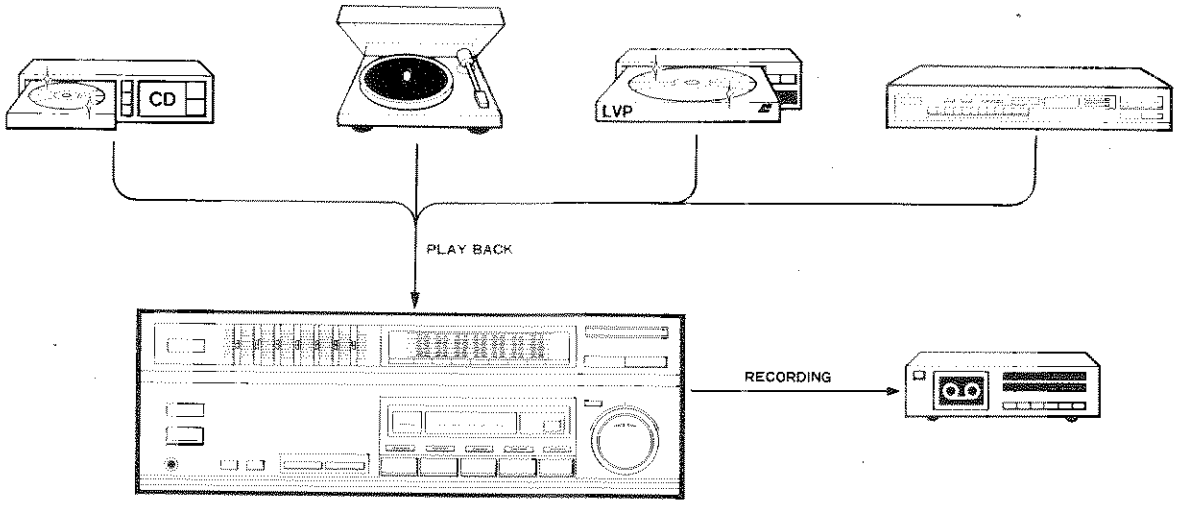
STATION CALL switch "memo"

It is recommended that you make a note of the preset stations.

S.C. switch •	1	2	3	4	5	6	7	8	9	10	11	12
Name of broadcast station												
Frequency												
S.C. switch ••	13	14	15	16	17	18	19	20	21	22	23	24
Name of broadcast station												
Frequency												

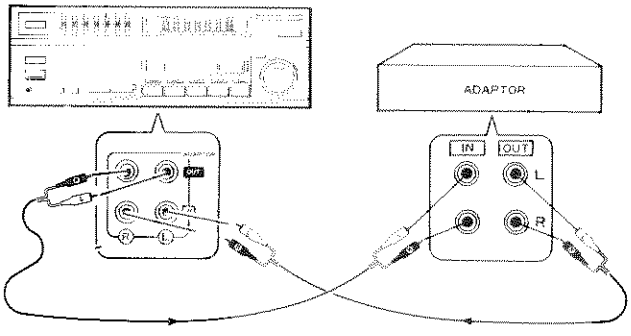
RECORDING TAPES:

- While listening to playback on equipment connected to the rear panel terminals , you can record these same sounds on tape merely by setting your tape deck to the recording mode.
- The sound compensated with the built-in graphic equalizer can be recorded.
- Refer to the operating instructions for your tape deck for proper operating procedures.



TO USE THE COMPONENT CONNECTED TO THE ADAPTOR TERMINALS:

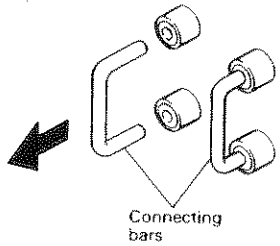
By connecting an adaptor component (dynamic expander), source sounds (from records, tapes, AM/FM broadcasts, etc.) can be heard with tone compensation.



[Connection]

(1) Set the POWER switch to OFF.

(2) Remove the two connecting bars from the adaptor terminals.



(3) Connect the adaptor component in accordance with the connection diagram in the section "Connections."

[Operation]

(1) Play back the source.

(2) Operate the adaptor component

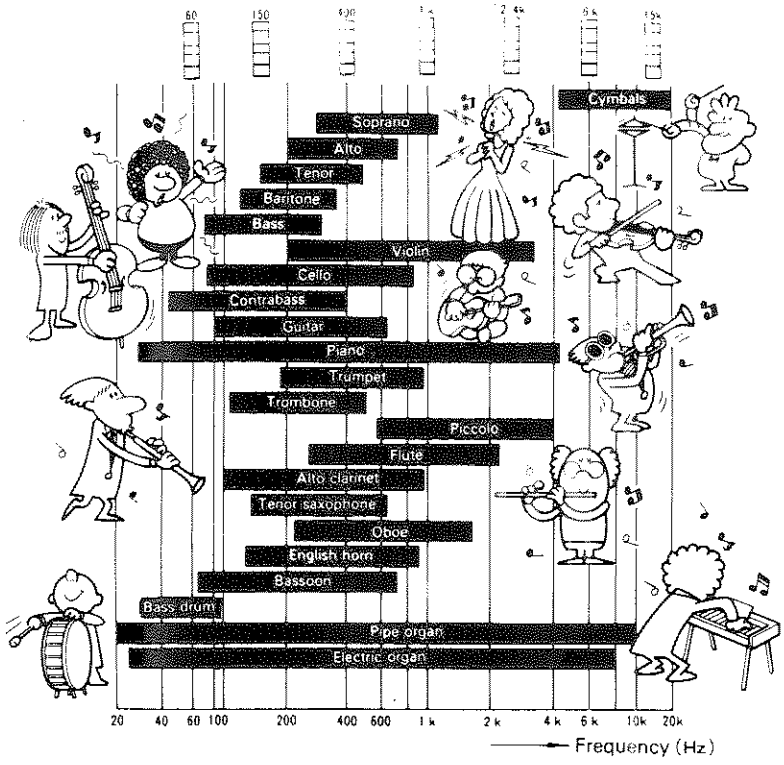
The sound compensated with the connected adaptor component can be recorded on a tape deck.

NOTE:

Be sure to perform this operation with the adaptor component's power switch in the ON position. Even when not using the adaptor component, its power switch must be left ON. If the adaptor component is switched OFF, no sound will be produced, or the playback sound will be distorted.

SOUND COMPENSATION (Using the Graphic Equalizer)

All instruments and vocals have their own frequency band, as shown in the figure.
By moving the controls up or down, the volume of the instruments preferred can be boosted or other instruments can be attenuated.
For instance, it is possible to boost the 60Hz frequency and give the bass drum and greater "punch" or boost the 1kHz frequency and position the vocals at the front. When the 6kHz frequency is boosted, the cymbals and "high hat" sound much clearer.
Instruments and vocals have a great many harmonic components along with the fundamental frequency band and so you can have lots of fun operating the 7 controls to achieve the sound of your choice.



TROUBLESHOOTING

Incorrect operations are often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Investigate the other components and electrical appliances being used.
If the trouble cannot be rectified even after exercising the checks listed below, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

Amplifier Section

Symptom	Probable Cause	Remedy
No power supplied to unit.	• Power plug is disconnected from outlet. • The component's power plug has been plugged into another component's power outlet (e.g. timer, etc.), but power to that unit is disconnected.	• Insert plug securely in outlet. • Turn on power to other component.
No sound.	• Connecting cords are disconnected from terminals, or connected incorrectly. • Terminals or connecting cords' pin plugs are dirty. • The connecting bar(s) is disconnected from the adaptor terminals. • The MUTING switch is set to ON. • The function switch selected does not match the component being played back. • Operation of other components is mistaken.	• Connect securely. • Clean terminals and plugs. • Replace the connecting bar properly. • Turn switch OFF. • Set switches correctly (PHONO, TUNER, CD, VEDEO/AUX, TAPE). • Consult the operating instructions for the other components.
No sound from one speaker.	• Connecting cords or speaker wires are disconnected to the side. • BALANCE control have been adjusted to one side.	• Connect securely. • Adjust BALANCE control to center position.
Can't record tapes.	• Connections are mistaken. • Operation of tape deck is mistaken.	• Reconnect properly. • Consult the operating instructions for the tape deck.

Tuner Section

Symptom	Cause	Remedy
No sound.	• Has the antenna been disconnected or is the connection loose? • Has the power cord been unplugged for several days? (Station memory has been lost.)	• Connect the antenna properly. • Memorize the preset stations once again.
Sound distordion. **[On the FM band]**	• Are the signals weak and reception poor? • Static from other appliances (particularly automobiles) or multipath reflection (radio waves beamed off mountains and tall buildings and not received directly.) • Are radio waves weak, causing antenna input to be insufficient?	• Substitute an FM outdoor antenna for the FM T-type antenna. • Set the FM MONO switch to ON (reception will be in monaural). • Try varying the height and direction of the antenna or use an FM outdoor antenna substituting a 75Ω coaxial cable for the standard cable and fixing it as far away as possible from the street. • Switch OFF the CD player.
Sound distordion. [On the AM band]	• Is the AM loop antenna oriented poorly or located in an unsatisfactory position? • Static from other electrical appliances (fluorescent lights/motors?)	• Change the direction of the antenna until best reception is obtained as far as possible from tuner. • Switch off other appliances or keep as far away as possible from the tuner when in use.
Stereo broadcasts not received in stereo.	• Are the signals weak, with insufficient input? • Is the FM MONO switch ON?	• Change to an outdoor FM antenna. • Press the FM MONO switch OFF.

SPECIFICATIONS

[SA-1480]

Amplifier Section

Music power
1 kHz, T.H.D. 10%, 8Ω . . . . . 350W + 350W
Peak music power
L + R channels 1400W

Continuous average power output is 130 watts* per channel, min., at 8 ohms from 20 Hertz to 20,000 Hertz with no more than 0.05% total harmonic distortion.

Input (Sensitivity/Impedance)
PHONO . . . . . 2.5 mV/50 kΩ
CD, VIDEO, TAPE PLAY, ADAPTOR IN . . . . . 150 mV/50 kΩ
Phono Overload Level (T.H.D. 0.1%, 1 kHz) 100mV
Output (Level/Impedance)
TAPE REC, ADAPTOR OUT . . . . . 150 mV/2.2 kΩ
Frequency Response
PHONO 20 Hz to 20 kHz (RIAA equalization) . . ±1 dB
TUNER, CD, VIDEO, ADAPTOR IN, TAPE PLAY
10 Hz to 50 kHz . . . . . ±3 dB
Graphic equalizer
60 Hz . . . . . ±10 dB
150 Hz . . . . . ±10 dB
400 Hz . . . . . ±10 dB
1 kHz . . . . . ±10 dB
2.4 kHz . . . . . ±10 dB
6 kHz . . . . . ±10 dB
15 kHz . . . . . ±10 dB
Hum and Noise (IHF, short circuited, A network)
PHONO . . . . . 72 dB
CD, VIDEO, ADAPTOR IN, TAPE PLAY . . . . . 96 dB

Miscellaneous

Power Requirements . . . ~ AC 110V/120 ~ 127V/220V/240V (switchable), 50/60 Hz
Power Consumption . . . . . 690 W
Dimensions . . . . . 420 (W) x 145 (H) x 320 (D) mm
16-1/2 (W) x 5-3/4 (H) x 12-5/8 (D) in
Weight (without package) . . . . . 9.2 kg (20 lb 5 oz)

Furnished Parts

Remote control unit 1
Batteries AAA/R03 2
Operating Instructions 1

[TX-1080Z]

FM Tuner Section

Frequency range . . . . . 87.5 MHz to 108 MHz
Usable Sensitivity (IHF) 12.7dBf (1.2μV/75Ω)
50dB Quieting Sensitivity . . . MONO: 18dBf (2.2μV/75Ω)
STEREO: 38.3dBf (22.6μV/75Ω)
Signal-to-Noise Ratio . . . . . Mono; 77 dB (at 85 dBf)
Stereo; 73 dB (at 85 dBf)
Distortion . . . . . 0.5% (1 kHz)
Alternate Channel Selectivity . . . . . 60 dB (400 kHz)
Stereo Separation . . . . . 40 dB (1 kHz)
Frequency Response . . . . . 30 Hz to 15 kHz (±1 dB)
Image Response Ratio . . . . . 38 dB
IF Response Ratio . . . . . 110 dB
Antenna Input . . . . . 300 Ω balanced
75 Ω unbalanced
Output . . . . . 650mV (100% MOD.)

AM Tuner Section

Frequency range (10kHz/9kHz step) . . . . . 530/531 kHz to 1,700/1,602 kHz
Sensitivity (IHF, Loop antenna) . . . . . 350 μV/m
Selectivity . . . . . 20 dB
Signal-to-Noise Ratio . . . . . 45 dB
IF Response Ratio . . . . . 50 dB
Antenna . . . . . Loop Antenna
Output . . . . . 150 mV (30% MOD.)

Miscellaneous

Dimensions . . . . . 420 (W) x 60 (H) x 215 (D) mm
16-1/2 (W) x 2-3/8 (H) x 8-7/16 (D) in
Weight (without package) . . . . . 2 kg (4 lb 6 oz)

Furnished Parts

FM T-type Antenna 1
AM Loop Antenna 1

NOTE:

- *Specifications and design subject to possible modification without notice due to improvements.*
- **Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Claims for Amplifier.*

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